

*The 2004 Survey of the Byzantine Settlement at Selime-Yaprakhisar in the Peristrema Valley, Cappadocia*

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**T**HE MODERN TURKISH villages of Selime and Yaprakhisar are located at the northern opening of the Peristrema Valley (also known as the Ihlara Vadisi or the Melendiz Suyu Vadisi), in the province of Aksaray in western Cappadocia, on the northern slopes of Hasan Dağı. Our survey project has focused on measuring, drawing, and photographing all standing and visible architectural remains from the Byzantine period around Selime-Yaprakhisar (figs. 1, 2). The 2004 survey continued work from similar surveys in 1997 and 2003.<sup>1</sup> In 1997, an outline of the settlement was established, as shown in the site diagram, which features the various parts of the settlement (fig. 3).<sup>2</sup> In 2003 and 2004 we recorded through measured plans and elevation drawings the most significant structures on-site, concentrating on those that are most accessible and best preserved.<sup>3</sup> As of now, we have found fifteen courtyard complexes carved into the volcanic rock outcroppings at Selime-Yaprakhisar, as well as a masonry fortification wall built atop Selime's high plateau. I interpret the complexes to be a loose association of domestic residences belonging to the local population of the tenth to eleventh centuries CE. Their documentation contributes to a fundamental reevaluation of Cappadocia's art and architecture from the middle Byzantine period: many of Cappadocia's settlements should be identified as lay rather than monastic in form, function,

I thank the Ministry of Culture and Tourism, General Directorate of Cultural Heritage and Museums, of the Republic of Turkey for permission to survey the area. In all three seasons students of architecture from the Middle East Technical University in Ankara assisted on the project, helping to measure on-site and to produce the final drawings. For the 1997 season, I thank Deniz Gündoğdu; for the 2003 and 2004 seasons I thank Bora Işık and Zeynep Kutlu. In 2003 and 2004, Kemal Gülçen of the photogrammetry lab of the Middle East Technical University worked as head surveyor, providing both the equipment and the technical skills for measuring on-site. B. Işık offered additional expertise concerning two-dimensional digital photogrammetry, which we implemented for measuring all the elevations at Yaprakhisar and parts of the sections at Selime Kalesi. Further special thanks

go to B. Işık for help with digital photography, and to Z. Kutlu for assistance in Ankara as translator and mediator in dealing with the bureaucracy required to mount this project. I thank the American Research Institute in Turkey for financial support of the 2003 season and Dumbarton Oaks for generous support of the 2004 season. The Dumbarton Oaks Project Grant of 2004 allowed the completion of the field project. The drawings reproduced in this report constitute a joint effort by K. Gülçen, B. Işık, Z. Kutlu, and myself. Unless otherwise indicated, all photographs and drawings are my own.

2 The site diagram shows the makeup of each complex and the relationship of the complexes to one another and to the landscape. It is not drawn to scale.

3 For the documentation and analysis from the 1997 season, see V. Kalas, "Rock-

Cut Architecture from the Peristrema Valley: Society and Settlement in Byzantine Cappadocia," (PhD diss., New York University, 2000). For a report on the 2003 season, see eadem, "The 2003 Survey of Selime-Yaprakhisar in the Peristrema Valley, Cappadocia," 22 *Araştırma Sonuçları Toplantısı* (Ankara, 2005), 2:59–70.

and context.<sup>4</sup> If this assessment is correct, our survey may offer new insights into the architectural legacy of Byzantium's famous Anatolian warlords of the tenth to eleventh centuries.

The complexes are carved into a thick layer of Cemilköy ignimbrite, a grayish volcanic rock, which is relatively easy to carve and erodes in conelike shapes. This geological deposit is located underneath a layer of Kızılkaaya ignimbrite, a reddish volcanic rock that is harder to carve, has formed high plateaus above the river, and erodes in rectangular block formations.<sup>5</sup> The Kızılkaaya plateaus are receding from the river valley to reveal the Cemilköy layers underneath. There are four Kızılkaaya plateaus, at Selime, Güllükkaya, Aleydinbaşı, and Yaprakhisar. At Selime and Yaprakhisar the modern villages are built up against the Cemilköy outcroppings underneath the Kızılkaaya plateaus, and the complexes from the Byzantine period are carved within the Cemilköy layer. The massive outcropping of Cemilköy ignimbrite at Selime is unusually thick and stands out as one of several peculiarities in the landscape of Cappadocia. Multilevel habitations are carved high up on the sides of the cliffs at Selime and Yaprakhisar, but their full extent is difficult to ascertain. Many spaces are hard to reach because large parts of the cliffs have fallen due to natural erosion, still active to this day. Continuous reuse over time by local inhabitants, moreover, has destroyed many of the remaining medieval spaces. At Güllükkaya, Aleydinbaşı, and Yaprakhisar 15 (as numbered in fig. 3), the Cemilköy



Fig. 1 View of Selime from Yaprakhisar (all photos are by the author)

4 For a critique of the traditional interpretation of Cappadocia as a land of monasteries, see V. Kalas, "Early Explorations of Cappadocia and the Monastic Myth," *BMGS* 28 (2004): 101–19; and R. Ousterhout, "Questioning the Architectural Evidence: Cappadocian Monasticism," in *Work and Worship at the Theotokos Evergetis 1050–1200*, ed. M. Mullett and A. Kirby (Belfast, 1997), 420–31. My interest in Cappadocia's courtyard complexes and their interpretation as residences follows upon the work of L. Rodley, *Cave*

*Monasteries of Byzantine Cappadocia* (Cambridge, 1985); T. Mathews and A.-C. Daskalakis-Mathews, "Islamic-Style Mansions in Byzantine Cappadocia and the Development of the Inverted T-Plan," *Journal of the Society of Architectural Historians* 56 (1997): 294–315; and R. Ousterhout, "Survey of the Byzantine Settlement at Çanlı Kilise in Cappadocia: Results of the 1995 and 1996 Seasons," *DOP* 51 (1997): 301–6. Results of this very exciting survey at Çanlı Kilise are presented fully in R. Ousterhout, *A Byzantine*

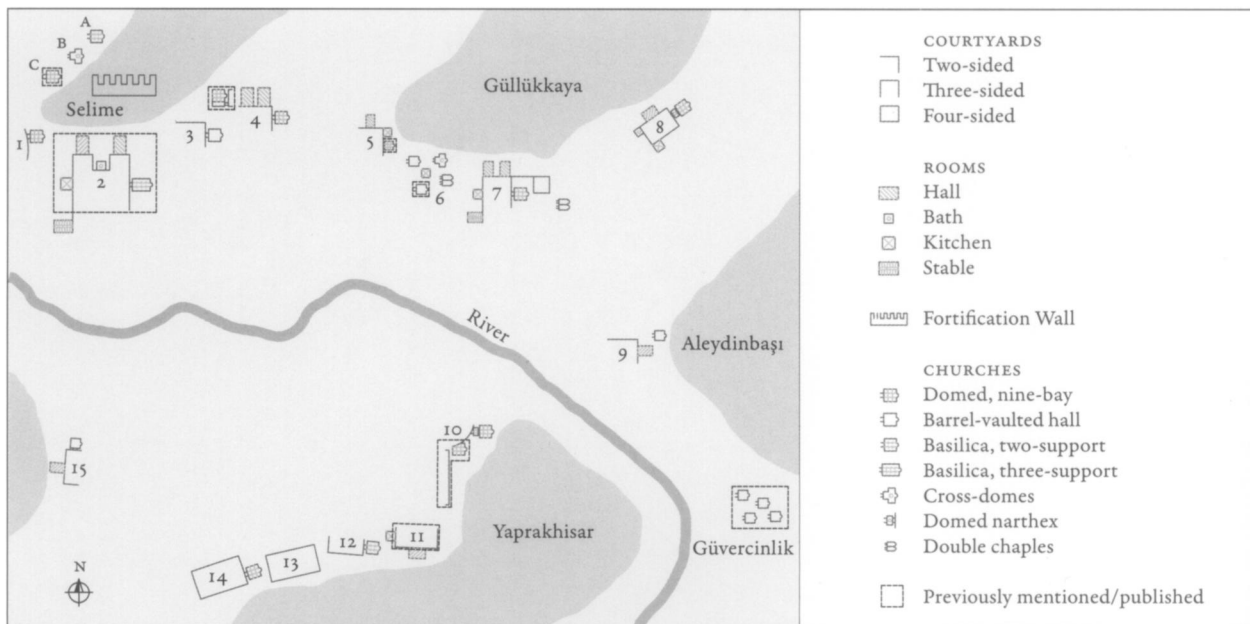
*Settlement in Cappadocia*, DOS 42 (Washington, DC, 2005).

5 I thank Vedat Toprak, Department of Geological Engineering, Middle East Technical University, for clarifying various aspects of Cappadocia's complex geology and directing me to the correct terminology; see A. Temel, M. N. Gündoğdu, A. Gourgaud, and J.-L. Le Pennec, "Ignimbrites of Cappadocia (Central Anatolia, Turkey): Petrology and Geochemistry," *Journal of Volcanology and Geothermal Research* 85 (1998): 447–71.



Fig. 2 View of Yaprakhisar from Selime

Fig. 3 Selime-Yaprakhisar, site diagram  
(drawing: V. Kalas, A. Emrick, Z. Kutlu)





outcroppings are less massive than those at Selime and Yaprakhisar, so the rock-cut structures do not extend high up on the sides of the cliffs, the cliffs themselves are less eroded, and people have not lived here in modern times. Therefore the dwellings from the medieval period at these locations are better preserved and easier to ascertain, although many spaces are buried under landslide.

The complexes and associated churches of the settlement that have been identified and recorded are arranged in a one-kilometer square area around the river, as can be seen in the scaled aerial photograph (fig. 4). At Selime-Yaprakhisar a wide expanse of farmland extends between the river and the rock outcroppings into which the medieval dwellings were carved. A constant water source near farmland, abundant soft rock for carving dwellings, and availability of sunlight for most of the day must have made this an ideal place for settlement. Accessibility must have also been a factor. The area is easy to reach from the Melendiz plain to the north, which may have been the principal entrance into the valley during the medieval period as well. Selime-Yaprakhisar has not been extensively explored until now because the river valley is best known for the painted churches located between Ihlara and Belisırma, about twelve kilometers south of Selime-Yaprakhisar.<sup>6</sup> The valley between Ihlara and Belisırma forms a narrow canyon, which provides little land and sunlight between the poplar-lined riverbed and the high cliffs of Kızılkaya ignimbrite. The riverbed is also difficult to access from the steep cliffs. North of Belisırma, the narrow gorge widens, but few carved dwellings exist within the rock cliffs on either side. At the end of a four-kilometer stretch north of Belisırma, the valley contracts at an area called Güvercinlik. Emerging north from Güvercinlik, one encounters the much wider valley around Selime-Yaprakhisar.

The courtyard complexes at Selime-Yaprakhisar constitute the core of the settlement, whose boundaries are defined to the northwest and southeast by clusters of funerary chapels not attached to any complex. Three chapels north of Selime delineate the northern limit of the settlement (A, B, and C on fig. 3).<sup>7</sup> Four chapels at Güvercinlik, southeast of Yaprakhisar, mark the southernmost extent. Tombs found in two of the four chapels at Güvercinlik include painted funerary inscriptions dated

6 This region was first documented by N. Thierry, *Nouvelles églises rupestres de Cappadoce: Région du Hasan Dağı* (Paris, 1963); for a more recent catalogue of the churches in the Peristrema Valley, see Y. Ötügen, *Ihlara Vadisi* (Ankara, 1989); see also "Peristrema Valley" in *Kappadokien (Kappadokia, Charsianon, Sebasteia und Lykandos)*, F. Hild and M. Restle (Vienna, 1981), fig. 19; and "Plan No. 6: Peristrema

Valley" in *Arts of Cappadocia*, ed. L. Giovannini (Geneva, 1972), 205.

7 These chapels were discovered in 1997 and measured and drawn in 2004. They exhibit three different layouts and demonstrate that the Cappadocian carvers commanded a diverse repertoire of designs, which they could execute with great flexibility.





Fig. 4 Selime-Yaprakhisar, scaled aerial photograph (photo: V. Kalas, A. Emrick, Z. Kutlu)

1023 and 1024.<sup>8</sup> At Aleydinbaşı 9, a small chapel discovered during our 2003 season includes a painted funerary inscription dated 1035 (fig. 5). These tomb inscriptions provide a secure, early eleventh-century date for the Byzantine period of settlement.<sup>9</sup>

The chapel at Aleydinbaşı is partly buried under landslide. Its plan features a single, barrel-vaulted nave oriented north to south with a single apse opening off the east wall. Tombs are carved into the floor at the north and south ends of the nave. Each one consists of a long, rectangular cavity oriented west to east and curved at the short ends, with a lip at the surface into which a stone lid was inserted. At least four such tombs, now empty, appear in this chapel, and several fragments of broken lids lie scattered on the ground. The funerary inscription is located at the tomb closest to the north wall, in a niche above the head (west end) of the tomb. The inscription is painted in black uncial script on a thin plaster surface and is written on either side of a large roundel framing a Maltese cross, a common decorative feature in Cappadocia. The inscription reads as follows:<sup>10</sup>

IC	XC
ΜΗΝΗ ΙΟΥΝΙΟ	ΕΙC ΙΒ
ΕΚΟΙΜΗΘΗ	ΔΘΛΗ
ΤΩ ΘΥ ΕΥ	CΤΑΘΕ
ΙΝ Γ Ε	ΤΘ
ΣΦ	ΜΓ
ΝΗ	ΚΑ

Normalized Greek transcription:

Ι(ησοῦ)ς Χ(ριστό)ς  
 μηνὶ Ἰουνίου εἰς ιβ'  
 ἐκοιμήθη (ἡ) δούλη  
 τοῦ Θεοῦ Εὐσταθοῦς?  
 ἰνδ(ικτιῶνος) γ' ἔτος  
 ςφμγ'  
 νικᾶ

Jesus Christ conquers.  
 In the month of June  
 on the twelfth (day)  
 passed away the servant  
 of God Eustatho,  
 indiction 3 of the year  
 6543 [= 1035].



Fig. 5 Funerary inscription in the chapel at Aleydinbaşı 9

8 The chapels at Güvercinlik are known as Davullu Kilise, Çohum Kilisesi, Yazılı Kilise, and Aleygediği Kilise. Both inscriptions at Yazılı Kilise (1024) and Aleygediği Kilisesi (1023) name Theodule as the deceased; see N. Thierry, "Études cappadociennes: Région du Hasan Dağı; Compléments pour 1974," *CahArch* 24 (1975), 183–90.

9 Two other important, painted inscriptions of the settlement do not provide concrete dates. They can be attributed, nevertheless, to the same period of settlement through the style and content of the writing. These are funerary poems located in the narthex of the basilica church at Selime Kalesi and in the narthex of Derviş Akın Kilisesi, which I associate with the area of Selime 4; see Kalas, "Rock-Cut Architecture," 119–21, 153–54 (n. 3 above).

10 I thank Catherine Jolivet-Lévy and Georges Kiourtzian for their assistance in reading the inscription. They have suggested that the name Eustathous can be understood as the genitive form of Eustatho, the feminine of Eustathios, for the name of the woman commemorated in the inscription.

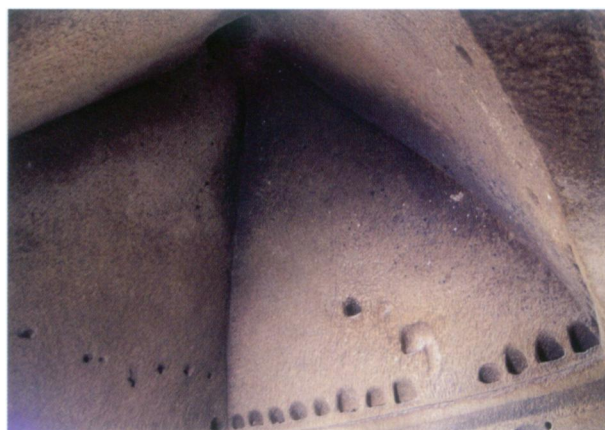
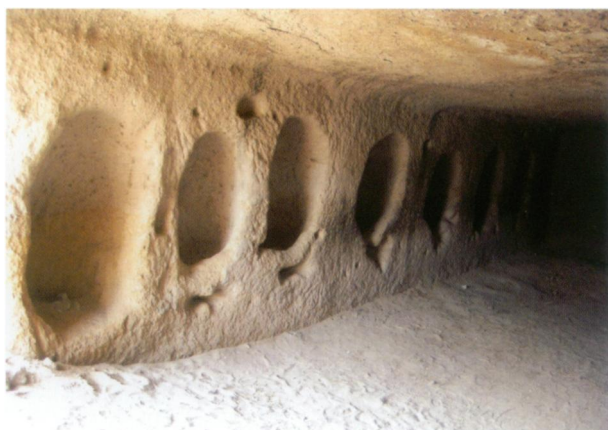




Fig. 6 Güllükkaya 8, courtyard, view toward the southwest

Fig. 7 Mangers inside the stable near Selime Kalesi

Fig. 8 Conical ceiling inside the kitchen at Selime Kalesi



The characteristic architectural features of the complexes can be summarized as follows. Courtyards, often four sided, are sculpted directly out of the rock, as in the example at Güllükkaya 8 (fig. 6). The principal wall of the courtyard that leads into the main rooms of the complex is ornamented by a multiregister, sculpted façade with blind niches and arcades. Some courtyards, on the other hand, consist simply of the outdoor space between rooms carved into the natural landscape. All the courtyards face the river and surrounding farmland. Several kinds of rooms open into the courtyards. These include utilitarian rooms, such as stables, kitchens, and perhaps baths, with rock-cut features inside that indicate their functions. For example, a stable has mangers carved on its walls (fig. 7), and a kitchen has a conical ceiling with a ventilation shaft at its summit (fig. 8). Many other rooms do not display distinct features to demonstrate their functions; they could have been multiple-purpose storage and living areas. Some rooms, however,



stand out because of their imitation barrel-vaults, cornices, engaged piers, and blind niches and arcades articulating their walls. In a few examples, carved crosses and geometric designs adorn a flat ceiling. These rooms are more formal in character and are centrally placed in the overall layout of the complexes. They may have been the principal dining or reception halls of the houses, while at the same time serving other functions as well.

Almost all the complexes include a church attached to one side of the courtyard. The required east orientation of the church was carefully maintained, so the side of the courtyard onto which the church was placed depended on the orientation of the courtyard. Thus the layouts of the complexes north of the river at Selime mirror the examples south of the river at Yaprakhisar. In other words, standing in the courtyards of the complexes at Selime, one encounters the church on the right. Standing in the courtyards at Yaprakhisar, one finds the church on the left. Most of these churches remained unpainted, and therefore have never been studied. They exhibit the domed, four-support, nine-bay plan, which is common for churches in the region from the tenth century onward. The complexes and their component parts, moreover, are similarly designed, decorated, and laid out, so they appear contemporary to one another. Combining stylistic elements in the architecture of the complexes with evidence from the inscriptions of the funerary chapels, we conclude that the settlement must date from the tenth to eleventh centuries CE.

The double-courtyard complex known as Selime Kalesi is the largest and most elaborate in design and decoration of all the examples recorded thus far from Byzantine Cappadocia (fig. 9, which is Selime 2 on fig. 3).<sup>11</sup> It is also the most significant structure at Selime-Yaprakhisar. At Selime Kalesi, rooms are arranged around two courtyards, 1 and 32 on fig. 9. Among the most important are a kitchen, two formal halls, a bathing area between the two halls, and a basilica church with side chapel and burial narthex.<sup>12</sup> The kitchen comprises the large, main room 2 on fig. 9, which has additional rooms 3–4 attached to it. Hall one includes room 12, with attached rooms 13–14, and 12a–d on the upper level. These are arranged around the first courtyard. Arranged

<sup>11</sup> It is larger than the newly recorded examples at Çanlı Kilise in Ousterhout, *Byzantine Settlement*, and the largest in the corpus published as monasteries by Rodley, *Cave Monasteries* (both n. 4 above).

<sup>12</sup> Lyn Rodley first described and outlined Selime Kalesi as a double-courtyard complex. Her sketch plan of its various parts has served as an important point of departure for the current study; see *Cave*

*Monasteries*, fig. 13. Prior to Rodley are the following accounts: H. Rott, *Kleinasiatische Denkmäler aus Pisidien, Pamphylien, Kappadokien, Lykien über christliche Denkmäler* (Leipzig, 1908), 263–64, includes a photograph of the basilica church; J. Lafontaine-Dosogne, “Nouvelles notes cappadociennes,” *Byzantion* 33.1 (1963): 174–76, mentions the basilica; the same author drew a sketch plan of the church and

analyzed the donor portrait painted on the interior, west wall above the entrance, in “La Kale Kilisesi de Selime et sa représentation des donateurs,” in *Zetesis: Album Amicorum E. de Strijcker* (Antwerp–Utrecht, 1973), 741–53; Thierry, “Études cappadociennes,” 184, figs. 2 and 13, identified hall two as a “monastic hall,” drew a sketch plan, and commented that the complex deserves a separate study on account of its great size.

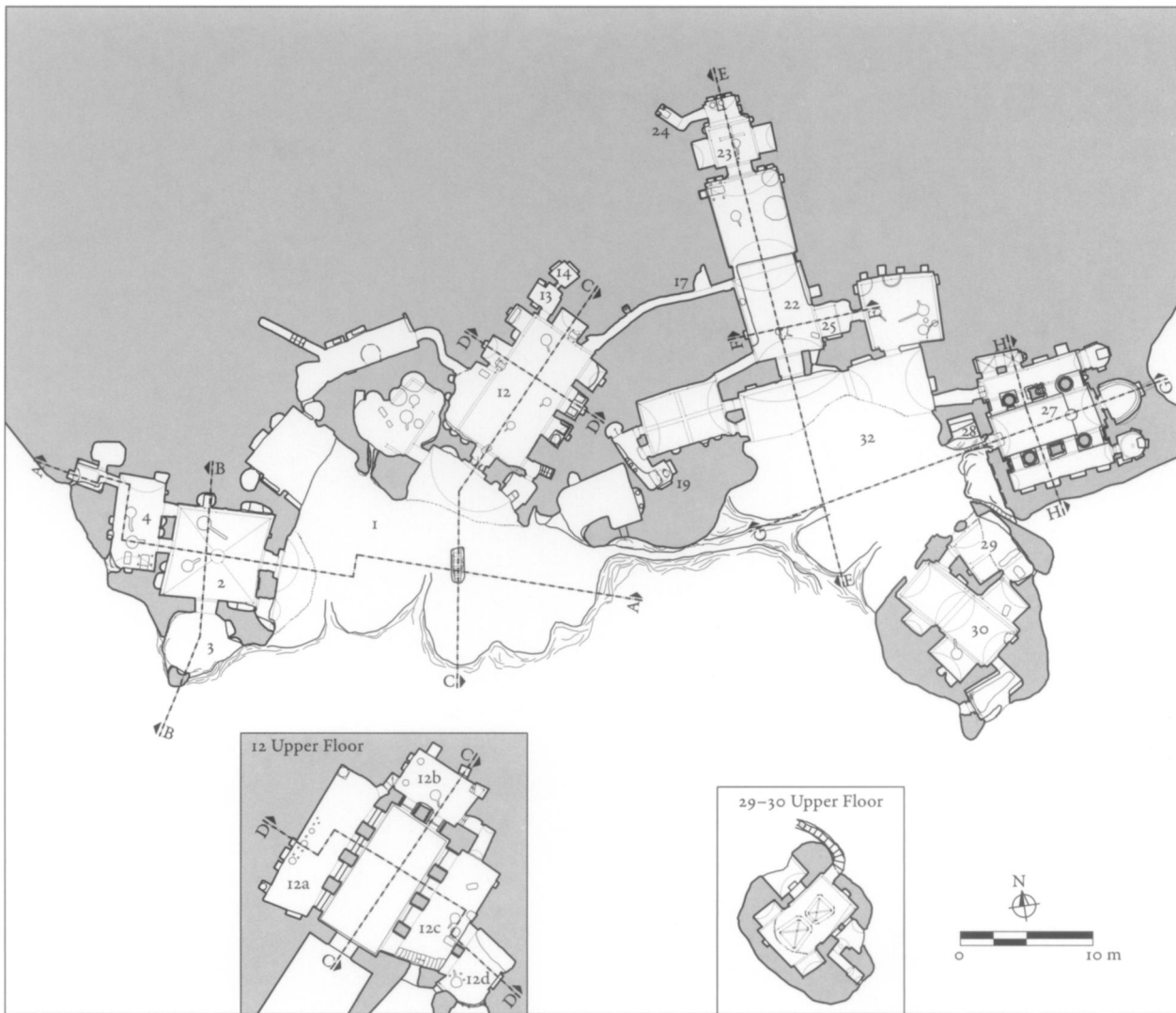


Fig. 9 Selime Kalesi, plan of the complex (drawing: V. Kalas, B. Işık, K. Gülcen, Z. Kutlu)

around the second courtyard are hall two and the church. Hall two includes rooms 22–25, and the bathing area corresponds to room 19. The basilica church with side chapel and burial narthex comprises rooms 27–28. The basilica plan is unusual for churches of the region at this time and constitutes one of the many outstanding features of this complex. The rooms within the rock at Selime Kalesi together with the outdoor spaces of the courtyards occupy three thousand square meters.<sup>13</sup> From end to end, Selime Kalesi spreads out over one hundred meters along the rock face.

<sup>13</sup> This surface area includes all the rooms carved out of the rock as well as the spaces in between that were not carved. Three thousand square meters illustrates well how extensively the complex spreads out along the landscape, and how long it takes, for

example, to walk from one end to the other, from the kitchen to the church. The total floor space of the carved areas is only approximately half this, 1,500 square meters.

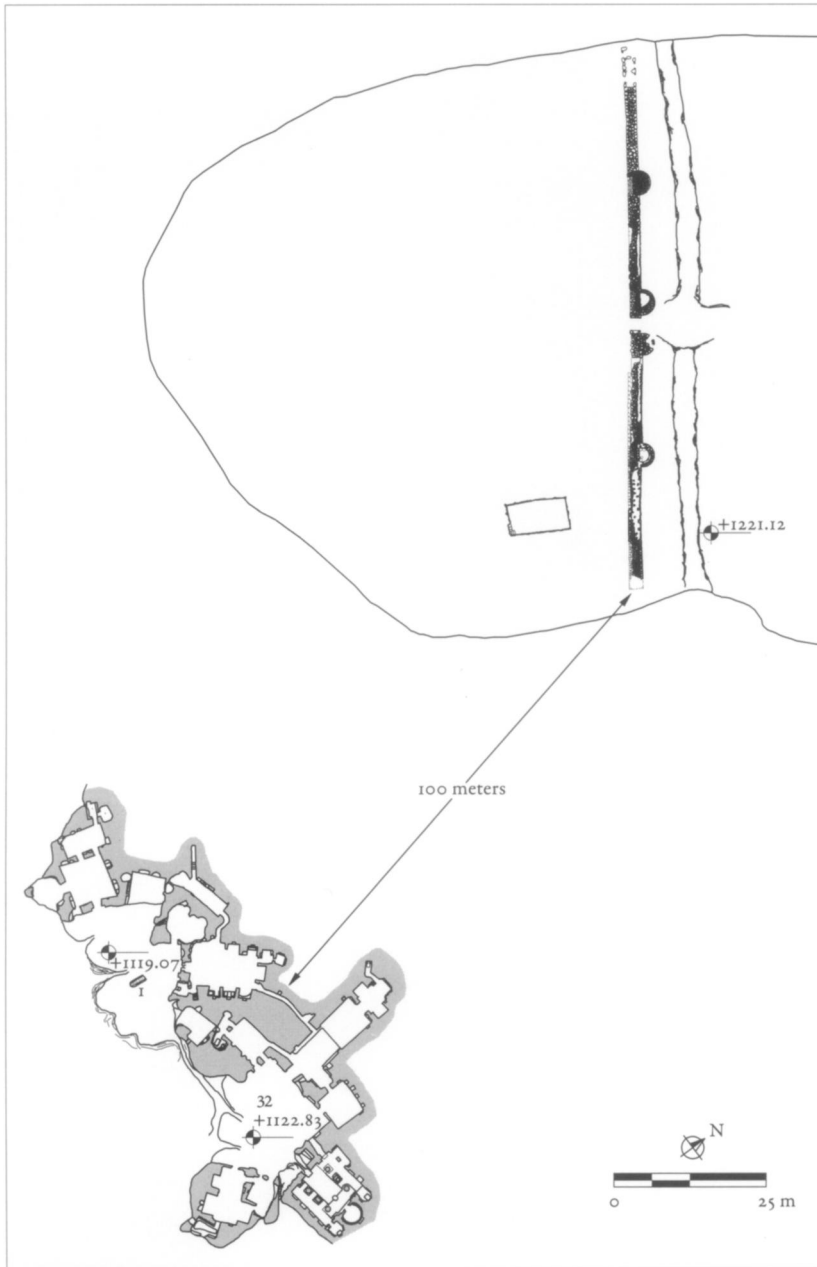


Fig. 10 Selime Kalesi and fortification wall, relational drawing (drawing: B. Işık)

Complementing its large scale and elaborate design, the complex is prominently situated high on the cliff at Selime, fifty meters above the riverbed. To arrive at Selime Kalesi, one takes a long, winding tunnel that begins at the bottom of the cliff and opens into the first courtyard, which must have been the principal entrance in the medieval period. From this salient position, providing an excellent southern outlook, the entire valley can be surveyed and its main entrance guarded. On account of these remarkable features, Selime Kalesi may have been the principal complex of the settlement. One hundred meters above Selime Kalesi (one hundred and fifty meters above the riverbed) on



the high Kızılkaya plateau is built a fortification wall connected to the complex by another long, steep tunnel carved through the cliff. The fortification wall must be contemporary with Selime Kalesi and the settlement in the valley below because it complements the complex's scale and orientation (fig. 10). Together they may have acted as a military outpost or stationing point, whose original name, unfortunately, remains unknown.<sup>14</sup> This strategically sited military installation suggests that Selime Kalesi was a lay, domestic residence of a local warlord and provides substantial material evidence for understanding the region as a frontier zone occupied by powerful magnate families of the middle Byzantine period.

The 2003 survey team measured and drew state plans of the fortification wall and of Selime Kalesi. In 2004 we continued our work by measuring and drawing in section four major areas of Selime Kalesi. Two sections apiece, one long and one short, were produced for the kitchen (2–6; fig. 11), hall one (12 and 12a–d), hall two (22–25; fig. 14), and the church (27–28; see fig. 9 for section lines). These eight sections, depicting the height of the various areas, provide an impression of the complex's volume and its three dimensions, which cannot be rendered in plan alone. By showing the vertical relationships of the various spaces to each other, our sections allow for a fuller understanding of the form and function of the complex. The overall aim is to record Selime Kalesi before it collapses and disappears.<sup>15</sup>

Upon ascending from the tunnel into the first courtyard, one encounters the entrance of the kitchen, opening in the west wall of the courtyard (left as one exits the tunnel), and that of hall one straight ahead (figs. 9, 11). They sit diagonally across the courtyard from each other. Hall one facilitates access to many service areas of the complex, such as the kitchen and the room for bathing, so it may have been the daily living space for the household. The more elaborate areas of the house, the ceremonial hall two and the church, open into a second, separate courtyard, at the opposite end of the complex. Spaces, therefore, are laid out hierarchically, with service areas encountered first and ceremonial areas last, perhaps indicating that the head of this household had considerable social status.<sup>16</sup>

14 One tentative attempt correlates Selime with Wadi Salamun mentioned by the Arab geographers al-Mas'ūdī (d. 956) and Ibn Khurdādhbeh (d. 912) as lying in the province of Cappadocia; see Hild and Restle, *Kappadokien*, 269–70 (n. 6 above).

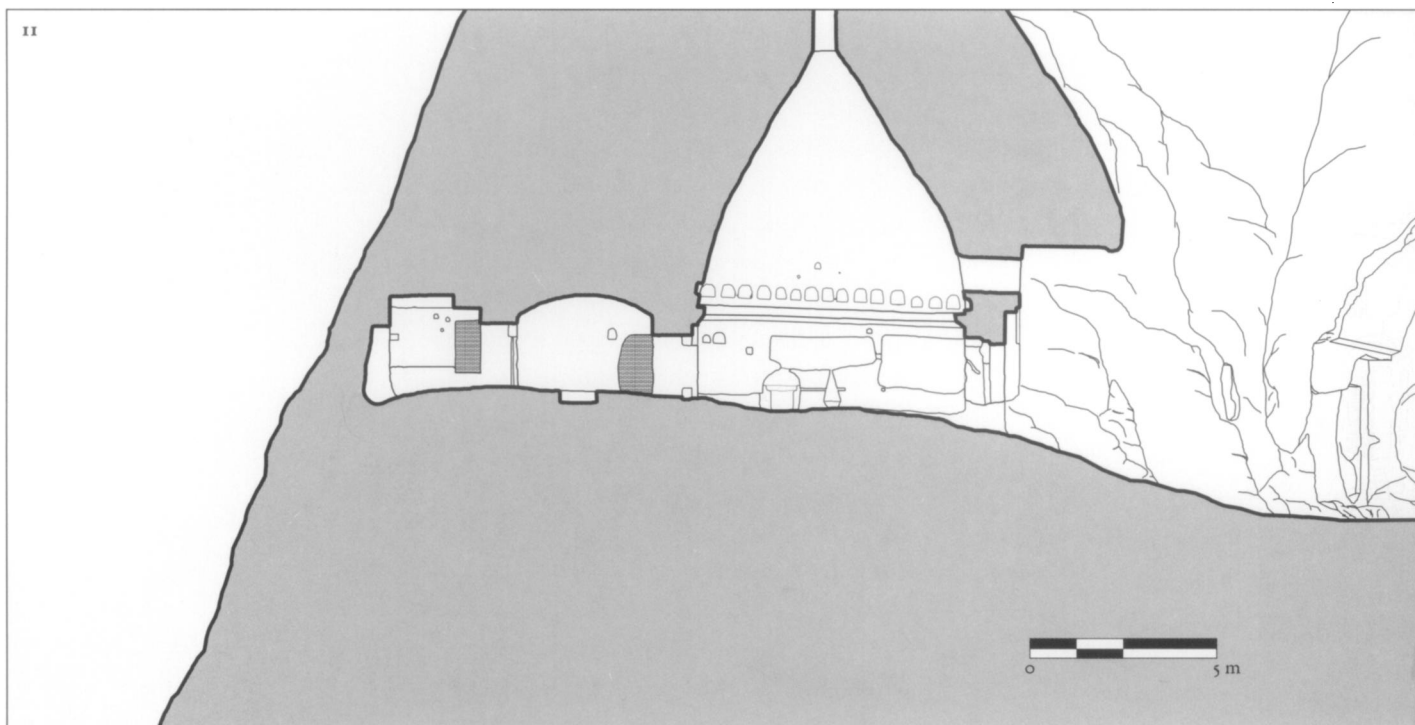
15 New cracks continue to appear throughout Selime Kalesi every year. In addition to the effects of natural erosion on the soft rock, the number of visitors to Selime,

which has steadily increased over the past few years, accelerates the decay.

Unfortunately, there is no way to prevent the erosion of Selime's cliff. It is possible, however, to regulate how tourists visit and treat the site. I have offered suggestions in site management to the Ministry of Culture and Tourism and the local museum in Aksaray to help prevent further damage.

16 For a sociological analysis of the settle-

ment's hierarchical arrangement, both of the rooms within each complex and of the complexes themselves, which lie in more-or-less prominent places within the landscape, see V. Kalas, "Cappadocia's Rock-Cut Courtyard Complexes: A Case Study for Domestic Architecture in Byzantium," *Late Antique Housing: From Palaces to Shops*, ed. L. Lavan, L. Özgenel, and A. Sarantis, *Late Antique Archaeology* 3.1 (Leiden, 2007, forthcoming).



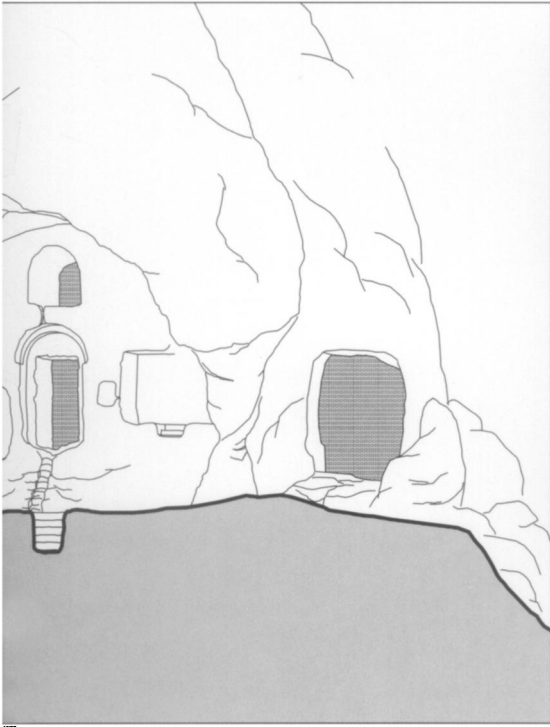
These important architectural features and their mutual relationships can now be better understood by adding our section drawings of 2004 to the plan of 2003. For example, a high, barrel-vaulted porch covers the courtyard entrances of the kitchen, the two halls, and the church. The more significant the space, the larger is its entrance porch. The vault of the porch in front of the kitchen is 6 m tall, whereas that of hall one rises 7 m above the courtyard floor, as can be seen in the section drawing through the kitchen and the first courtyard (figs. 11, 12). The principle applies to other dimensions as well. For example, the conical vault of the kitchen with a ventilation shaft at its summit rises 9.50 m above the floor, but rooms 3–6 behind the main room of the kitchen, perhaps additional work areas, are smaller in floor space and lower in height.

The two large halls at Selime Kalesi display interesting features. Hall one is tall, wide, and rectangular, measuring 14 m long, 8 m wide, and 5 m high. It is covered by a flat ceiling and is designed on two levels, which is unusual (fig. 13). Barrel-vaulted alcoves on the lower level have waist-high benches along their back walls that could have been used as platforms for sleeping. A single niche above each bench could have served as a cupboard. An arcade on the upper level opens onto a gallery that wraps around this intriguing space. Hall two is long and rectangular, like hall one, but much larger in floor area and height, measuring 16.50 m long, 6 m wide, and 7.50 m high. Instead of a flat ceiling, a tall, barrel vault adds considerable volume to an impressive

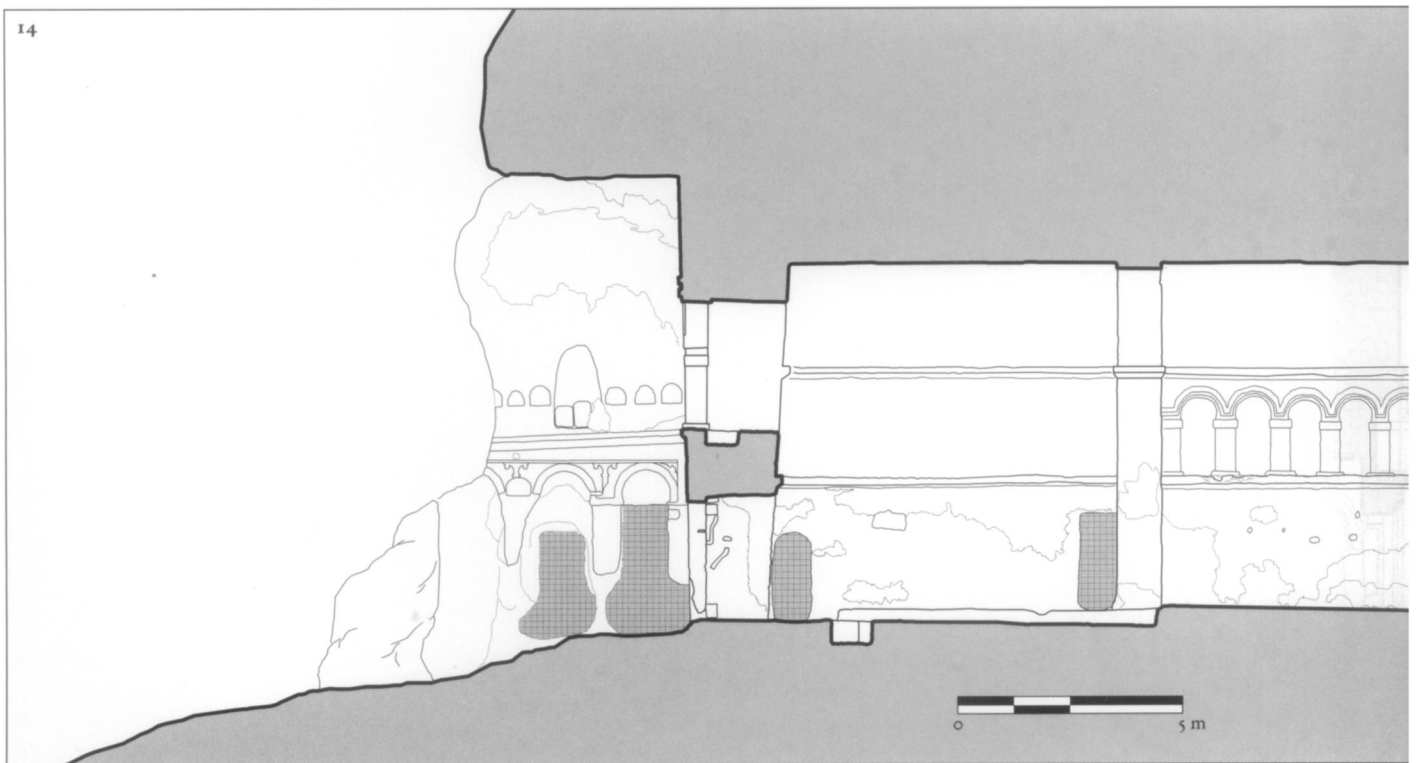
Fig. 11 Selime Kalesi, section A-A, through the first courtyard and the kitchen (drawing: V. Kalas, B. Işık, K. Gülcen)

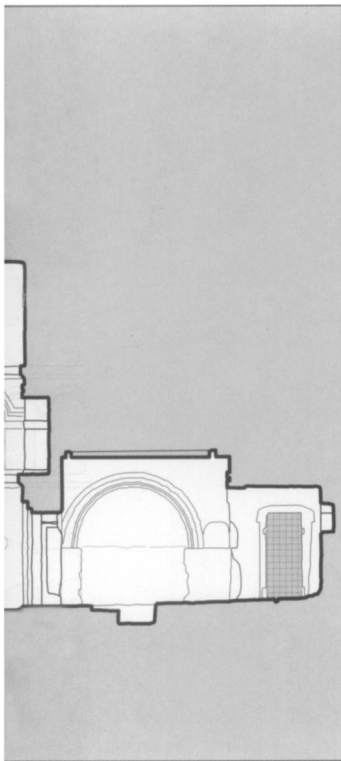
Fig. 12 Selime Kalesi, hall one, view of the vaulted entrance porch

Fig. 13 Selime Kalesi, hall one, interior view









interior (fig. 14). It features the tallest entrance porch, 10 m high, with a large arched window above the doorway into the hall to allow extra light and air inside (fig. 15). Perhaps the principal reception and dining space for the head of the household, this hall preserves several important features, such as an elevated threshold to the second half of the hall, a distinct and evenly carved blind arcade on the elevated part of the hall, and plaster on its walls (fig. 16). A tunnel (17) from hall one opens into the lower, not the upper, half of the hall, indicating that all visitors had to ascend the elevated threshold in ceremonial fashion. At the back of the hall is a cruciform room (23) with a cross carved in relief on the ceiling; barrel-vaulted alcoves with benches along the back walls, like those in hall one; and a private entrance into a latrine (24). Perhaps the cruciform room served as the private dining chamber, or maybe the private bedchamber of the head of the household.<sup>17</sup>

Finally, the basilica church of Selime Kalesi is the fourth impressive space of the complex, located diagonally across the courtyard from hall two. This is one of the largest rock-cut churches in Cappadocia,

Fig. 14 Selime Kalesi, section E-E, through hall two (drawing: V. Kalas, B. Işık, K. Gülcen)

Fig. 15 Selime Kalesi, hall two, view of the vaulted entrance porch

Fig. 16 Selime Kalesi, hall two, interior view

<sup>17</sup> I thank Paul Magdalino for discussing this problem with me on site. In my dissertation I identified this room as a triclinium, which may be problematic. Upon further study of the complex, we have found that the cruciform room would have had a large,

two-winged door closing it off from the elevated threshold of hall two. The doors could offer seclusion and privacy, while also allowing the inhabitant to emerge ceremoniously into hall two to greet his guests.





Fig. 17 Selime Kalesi, basilica church

measuring 12.50 m long, 11 m wide, and 7 m high. Although paintings in the central nave and apse are poorly preserved, the church is carefully executed (fig. 17). The alternating pier and column support system of the arcade is unusual, resembling contemporary Romanesque architecture of medieval Europe. Details such as the running hood molding of the arcade, the cornice at the springing of the barrel vault, colonnettes at the corners of the piers, and the capitals and bases for the columns and piers are nicely articulated. The church, moreover, is positioned within the rock to allow the carving of a window that lets light into the sanctuary of the central apse. Although Cappadocian rock-cut architecture is generally regarded as organically and haphazardly formed, details such as these show that considerable planning was involved in executing the complexes at Selime-Yaprakhisar.

In addition to measuring and drawing Selime Kalesi, we recorded significant features that may help to reconstruct its original shape. We noted the position of rock-cut furnishings and carvings, including examples that can be associated with secondary use of the structure. The goal of this operation was to assess the original form and function of each room and the relationships among the various spaces, both to one another and to the whole complex. The great challenge in this endeavor



was to determine which features belong to the original, Byzantine phase, and which belong to a secondary or later phase of recarving and use.<sup>18</sup> Particularly interesting at Selime Kalesi are cuttings on the rock surfaces around the entrances to various rooms and tunnels that could accommodate wooden beams as door frames. At the entrance from the courtyard to hall two, for example, socket holes at the top and bottom corners on either side of the rectangular entrance show that two large beams were inserted horizontally across it (fig. 18). Two door wings could have been hinged on either side of this frame so that the wings opened toward the inside of the room. A slightly S-shaped cutting on the rock surface just inside of where the door closed demonstrates that a third beam could have been inserted across the middle of the entrance to bolt the door shut. Additional cuttings throughout the complex attest to other kinds of lost furnishings, probably wooden, like shelves in niches or grilles to block windows. We also recorded systematically the number, kind, and size of *tandır* found carved on the floors of various spaces. A *tandır* is a circular pit, approximately one meter in diameter, still utilized in Cappadocia today for both heating and cooking. The most interesting example is carved into the floor of the large opening above the doorway



Fig. 18 Selime Kalesi, hall two, detailed view of the entrance from the courtyard, with socket holes to accommodate a wooden doorframe

**18** Primary features are carefully and precisely carved and are consistent with the design and layout of the rooms in which they are found. Secondary features are of lesser quality and often intrude haphazardly into the architectural design, cutting through cornices or piers, for example. All primary features appear to belong to the tenth- to eleventh-century phase of execution, whereas secondary features are impossible

to date. They may range from the medieval to the modern period. My sincere thanks go to Robert Ousterhout for showing me how to read Cappadocian architecture and how to make these kinds of distinctions. My approach to the architecture at Selime-Yaprakhisar developed from my experience working with him at Çanlı Kilise during the 1996 and 1997 seasons.

to hall two, a highly unlikely place for cooking (fig. 15). Perhaps this *tandır*, located in a very unusual spot, could have heated air coming into the hall during the winter months.

In three different rooms (4, 12, and 22) of the complex, we have found four examples of a feature that may be identified as a pit loom. Several examples appear in other complexes of the settlement as well. A rectangular pit (about 1.50 × 0.50 m) is carved into the floor, usually with one short side positioned near a wall, as in the example at



the southeast corner of room 4 (fig. 19). A place to sit is carved at the short end against the wall, and the depression in front of this seat could accommodate the weaver's legs. Postholes are positioned in the floor beside the four corners of the pit to erect a frame above it. The loom, therefore, would be arranged parallel to the wall, and the weaver would sit under the frame to weave horizontally. The back wall would be used as an additional support of the frame and a backrest for the weaver.<sup>19</sup> These features belong to the original carving of the complex and provide substantial material evidence for household production of textiles in Byzantium.<sup>20</sup>

Fig. 19 Selime Kalesi, pit loom, located at the southeast corner of room 4

In addition to recording Selime Kalesi, we have specially emphasized the courtyard complexes at Yaprakhisar, which display the most impressive rock-cut façades discovered thus far in Cappadocia. The sculpted façades appear on the principal courtyard walls leading into the main rooms of the complexes. The unusually well-preserved façades at Yaprakhisar display the full extent of their original lengths and heights and are monumental in scale. The façades of most other complexes in Cappadocia that can be dated to the Byzantine period have collapsed, so that only the interiors remain.<sup>21</sup> At Yaprakhisar

19 For a modern example of a similar pit loom in a nearby, subsistence-farming village house, see F. Ertuğ-Yaraş, "An Ethnoarchaeological Study of Subsistence and Plant Gathering in Central Anatolia," (PhD diss., Washington University, St. Louis, 1997), pl. 110.

20 I thank Jennifer Ball for numerous discussions about the subject; see comments in J. Ball, *Byzantine Dress: Representations of Secular Dress* (New York, 2005), chap. 3.

21 See Kalas, "Rock-Cut Architecture," 107–17 (n. 3 above).



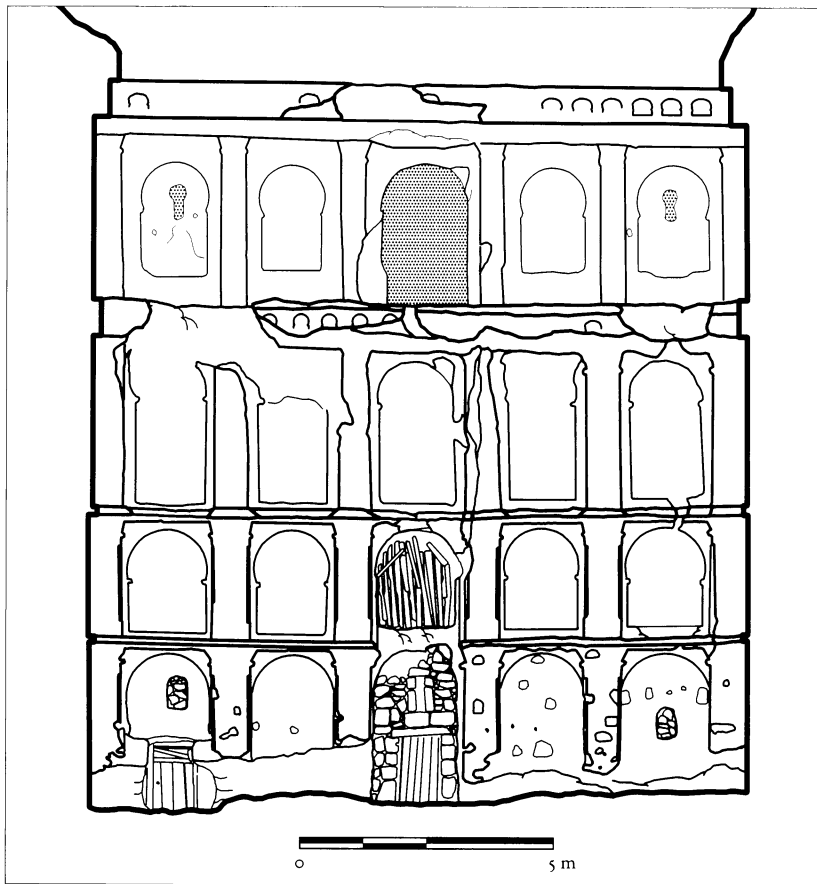


Fig. 20 Yaprakhisar 11, elevation drawing of the courtyard façade (drawing: V. Kalas, B. Işık, K. Gülcen)

Fig. 21 Yaprakhisar 11, view of the courtyard façade



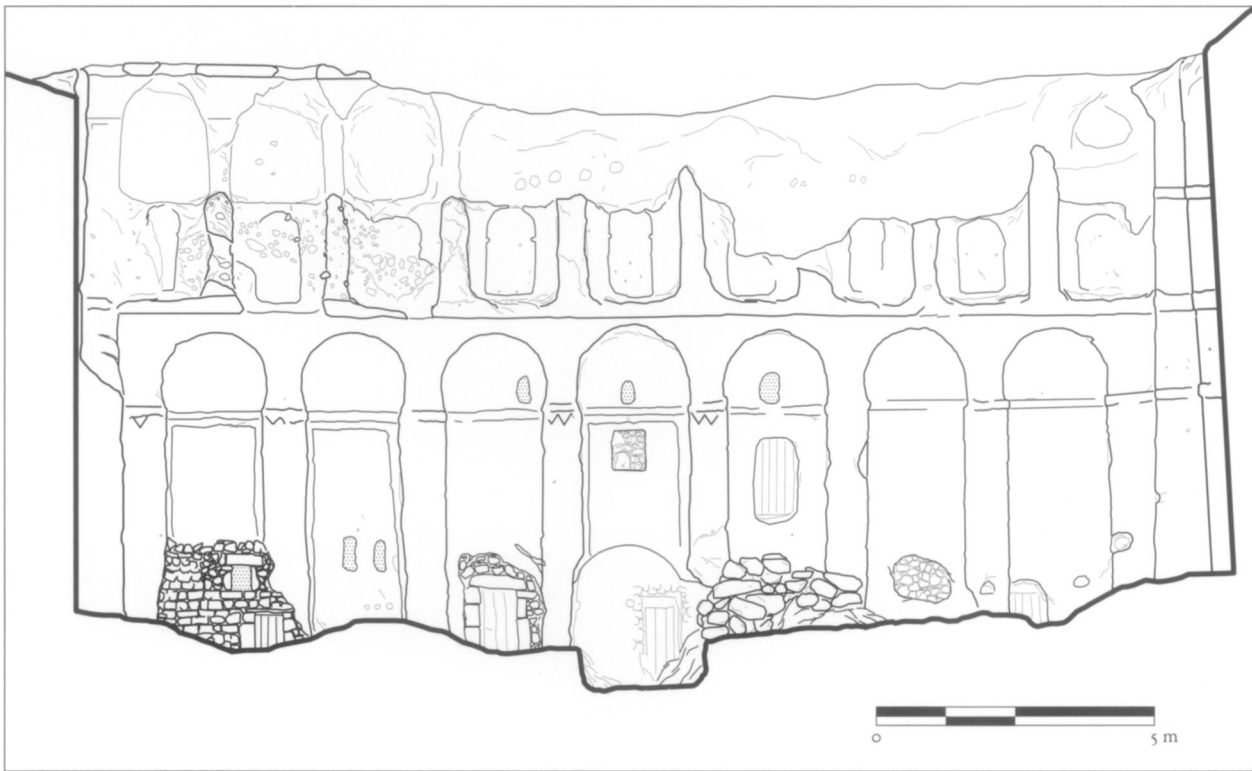
local villagers use the complexes for dwelling and storage. Thus, the façades suffer not only natural erosion but also recarving and reuse by the local population, who, for instance, install locks and doors. The interiors of these complexes, moreover, are almost entirely destroyed from the effects of continuous reuse over time. In 2003 we recorded the façade at Yaprakhisar 11 using two-dimensional digital photogrammetry to generate a measured elevation drawing. This technique is particularly effective in recording Cappadocian rock-cut architecture, and its application to Yaprakhisar's façades is new. In 2004 we continued in the same fashion by recording the façades at Yaprakhisar 10 and 14.

Among the façades at Yaprakhisar, and at other complexes of the settlement as well, two types can be distinguished (figs. 20–23). In both types, superimposed registers that vary in number and height divide each façade vertically. Laterally, however, one type uses pilasters to divide each register into bays; the other type features an uninterrupted blind arcade on each register. Every register on each façade includes the same number of bays or arches, either five, seven, or nine. The main doorway into the complex on the ground floor is placed in the central bay or arch to produce a symmetrical design. Shallow, horse-shoe-shaped blind niches of varying shapes and sizes further decorate the wall within each bay or arch in rhythmic, symmetrical patterns. Although all the façades follow a similar design pattern, no two are exactly the same. At Yaprakhisar 11 (13 m long and 14.50 m high) pilasters divide four registers of different heights into five bays. One horse-shoe-shaped blind niche decorates each bay. Yaprakhisar 14 (21 m long and 11 m high) presents two horizontal registers, a tall, lower one and a short, upper one. A continuous blind arcade of seven arches adorns the first register, and one shallow blind niche appears within each of the nine arches on the upper register.

These articulations of the façades do not match the interior spaces of the complexes; they merely ornament the courtyard wall. The four-story façade of Yaprakhisar 11, for example, corresponds to only two levels inside. At ground level, a tall, barrel-vaulted hall transverse to the courtyard is equal in length and height to the first two registers of the façade. Another hall similarly oriented lies behind the topmost register. A tunnel toward the back of the complex connects these two levels, so no spaces are carved behind the third register of the façade. At Yaprakhisar 14, the tall arcade at ground level does not correlate to any interior space, except for three small square rooms opening off the second, middle, and sixth arches, an arrangement that maintains lateral symmetry in the design. The large scale and elaboration of these façades that do not reflect interior spatial divisions may be seen as status markers for individual household owners.

Fig. 22 Yaprakhisar 14, elevation drawing of the courtyard façade (drawing: V. Kalas, B. Işık, K. Gülcen)

Fig. 23 Yaprakhisar 14, view of the courtyard façade





In addition to Selime Kalesi and the façades at Yaprakhisar, during the 2004 season we recorded various other parts of the settlement. By revisiting all areas we were able to make several corrections to the site diagram first produced in 1997. With a digital camera we photographed all fifteen complexes that had been previously recorded only in slides and black-and-white prints. Churches, courtyards, and utilitarian rooms associated with various complexes were also measured and drawn in state plan. In 2004 we measured and drew plans of the following: churches A, B, and C north of Selime (mentioned previously); a utilitarian room named Ambar Odası near Selime Kalesi; the large stable near the entrance to the tunnel leading up to Selime Kalesi (fig. 7); the Derviş Akın Kilisesi, which is associated with the area around Selime 4 and features the only well-preserved paintings on-site; two churches at Güllükkaya 6; one church with the dated inscription at Aleydinbaşı 9; a large kitchen at Yaprakhisar 11; and the courtyard of Yaprakhisar 13.

It is hoped that this study will provide a rare compendium of rock-cut architecture from Byzantine Cappadocia to document the art and architecture of houses, and the daily life of society on the Byzantine frontier. The observations on the original fittings of Selime Kalesi contribute to our understanding of the form and function of a middle Byzantine aristocratic residence. The façades at Yaprakhisar offer significant examples of nonecclesiastical, middle Byzantine architectural elevations. Investigation of possible cosmopolitan sources and influences on their design will inform the discussion of the cross-cultural context of Cappadocia during this time.<sup>22</sup> Overall, the architecture of the settlement demonstrates that strong local traditions of engineering a living environment merged with external artistic influences. Carvers worked within a particular design repertoire, which they could manipulate and change with great flexibility and virtuosity as they sculpted the landscape.

The settlement at Selime-Yaprakhisar, moreover, offers substantial material evidence for one of the most dynamic historical processes in the history of Byzantium. When the Byzantine empire regained its eastern territories after the devastating Persian and Arab invasions of preceding centuries, powerful Byzantine magnates and their families settled Cappadocia. Once secured, the region bred leaders of large families who, in two instances (Phokas, Tzimiskes), garnered enough strength and support from local contingents to usurp even imperial authority. Other such families (Maleinoi, Skleroi) were famed for disrupting imperial authority and were occasionally appeased by land grants, which may provide the historical context for Selime.<sup>23</sup> The important question posed by Selime Kalesi and its fortification wall is whether the installation should be considered part of Byzantium's

<sup>22</sup> See Mathews and Mathews, "Islamic-Style Mansions" (n. 4 above).

<sup>23</sup> For historical background see M. Kaplan, "Les grands propriétaires de Cappadoce (VI–XIe siècle)," *Le aree omogenee della civiltà rupestre nell'ambito dell'Impero bizantino: La Cappadocia* (Galatina, 1981), 125–58; J.-C. Cheynet, *Pouvoir et contestations à Byzance (963–1210)* (Paris, 1990); M. Whittow, *The Making of Byzantium 600–1025* (Berkeley, 1996); and J. Haldon, *The Byzantine Wars* (Gloucestershire, 2001), 78–96.

push east in the ninth to tenth centuries, or whether it belongs to the period after Cappadocia was reintegrated into the empire in the tenth to eleventh centuries and its lands parceled out to local lords.<sup>24</sup> The identity of the donors who appear painted on the west wall of the basilica church at Selime Kalesi, and are clad in brocaded robes, signifying their aristocratic status, remains a mystery.<sup>25</sup> These men surely owned and inhabited Selime Kalesi. Perhaps they also commanded the valley, the settlement at Selime-Yaprakhisar, and the wider region beyond.

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<sup>24</sup> As expressed by Anthony Bryer: "The ebb of Arab influence in central and eastern Anatolia revealed a number of provincial dynasties, many of Armenian origin, from which the government of Constantinople never completely wrested local control. From the eleventh century, these families helped to transform and 'feudalize' the Byzantine government and ruling class, successfully competing for

the throne itself"; "A Byzantine Family: The Gabrades, 976–1653," *University of Birmingham Historical Journal* 12.2 (1970): 164; see also S. Vryonis, "Byzantium: The Social Basis for Decline in the Eleventh Century," *GRBS* 2 (1952): 161–70.

<sup>25</sup> See Lafontaine-Dosogne, "Kale Kilisesi" (n. 12 above).